

BIBLIOGRAPHY

C. FITZHUGH TALMAN, Meteorologist in Charge of Library

RECENT ADDITIONS

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

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Group of solar changes. Washington. 1927. 16 p. figs. 24½ cm. (Smith. misc. coll. v. 80, no. 2.) (Pub. 2916.)
- Ångström, Anders.**
Recording nocturnal radiation. Stockholm. 1927. 12 p. illus. plate. 31½ cm. (Medd. Statens met.-hydrog. anstalt. Bd. 3, N:o. 12.)
- Brazil. Directoria de meteorologia.**
Atlas de nuvens. n. p. 1924. 8 plates. 34½ cm.
- Ferraz de Carvalho, Anselmo.**
Clima de Coimbra . . . Resumo das observações feitas no Observatório meteorológico da Universidade de Coimbra desde 1866 . . . Lisboa. 1922. 73,114 p. figs. plates. 32½ cm.
- Hartnack, Wilhelm.**
Wanderdünen Pommerns, ihre Form und Entstehung. Greifswald. 1925. vi, 112 p. illus. plate. 24½ cm.
- Jaeger, Fritz.**
Forschungen über das diluviale Klima in Mexico. Gotha. 1926. viii, 64 p. plates (part fold.) 28 cm. (Petermanns Mitteilungen, Ergänzungsheft Nr. 190.)
- Mallory, Walter Hampton.**
China: land of famine . . . New York. 1926. xvi, 199 p. incl. front. illus. maps. 26 cm. (Amer. geographical soc. Spec. pub. no. 6.) [Includes discussion of rainfall, drought, floods, etc.]
- Martonne, Emm. de.**
Une nouvelle fonction climatologique: l'indice d'aridité. 10 p. figs. plate. 27½ cm. (Extr.: La Météorologie, oct., 1926.)
- Mawson, Douglas.**
Records of the aurora polaris. Sydney. 1925. 191 p. figs. plates. 30½ cm. (Australasian Antarctic exped. 1911-14 Sci. rep. ser. B. v. 2. Terr. mag. & related observ. pt. 1.)
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Ocean currents in relation to oceanography, marine biology, meteorology and hydrography. Monaco. 1927. 43 p. 27½ cm. (Internat. hydrog. bur. Spec. pub. no. 19, March, 1927.)
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On the design of the Kew pattern barometer. London. 1925. p. 203-225. plates. diags. 31 cm. (Great Brit. met. off. Geophys. mem. no. 27 (v. 3, no. 7).)
- Shaw, William Napier.**
Manual of meteorology. v. 1. Cambridge. 1926. xx, 339 p. illus. plates. ports. diags. (part fold.) 27 cm.
- Smith, Wesley L.**
How I fly at night. p. 228-233. illus. 29 cm. (Journ. soc. automotive engin., N. Y. v. 19, Sept., 1926.)
- Stifel, Richard E.**
Every cloud has a foggy lining. p. 65-66. illus. 29½ cm. (Hygeia. Feb., 1927. v. 5, no. 2. (Chicago: Amer. med. assoc.))
- Tucker, W. M.**
Cloud types. p. 79-82. 22½ cm. (Proc. Indiana acad. sci.)
- Wiese, W.**
Polareis und atmosphärische Schwankungen. p. 273-299. diagr. 24½ cm. (Geografiska annaler, H. 3 och 4, 1924.)
- Young, H. C., & May, Curtis.**
Timing of apple scab sprays. 28 p. illus. 23 cm. (Ohio agric. exper. sta. Bull. no. 403, March, 1927.)

RECENT PAPERS BEARING ON METEOROLOGY

The following titles have been selected from the contents of the periodicals and serials recently received in the library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of all the journals from which it has been compiled. It shows only the articles that

appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau.

- Annalen der Hydrographie und maritimen Meteorologie. Berlin. 55. Jahrgang. 1927.*
- Baur, Franz.** Wert und Verwertung von Beziehungsgleichungen zur Voraussage von Mittelwerten der Wetterelemente für grössere Zeitabschnitte. p. 36-41. (Februar.)
- Petersen, P.** Die Eisverhältnisse des Winters 1925/26 in den ausserdeutschen europäischen Gewässern. p. 18-21. (Januar.) p. 41-49. (Februar.)
- Wegener, Kurt.** Die Plata-Stürme vom 10.-11. Juli 1923 und 10.-11. Januar 1925. p. 33-36. (Februar.)
- Astrophysical journal. Chicago. v. 64. March 1927.*
- Lindemann, F. A.** Note on the physical theory of meteors. p. 117-123.
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- McAdie, Alexander.** The fliers' aspects of aerography. Electric storms present certain hazards. Few cases of planes being struck. One on record proved inconsequential. p. 571-573. (March 21.)
- Andrus, C. G.** Airways aerological work. How the Weather bureau stations function to provide air mail pilots with accurate weather information. p. 778-779. (April 18.)
- Beiträge zur Geophysik. Leipzig. 16. Band, 1/2. Heft. 1927.*
- Kartschagin, W., & Sweschnikowa, M.** Über den Tagesgang der Sonnenstrahlung und der vom Zenith kommenden zerstreuten Himmelsstrahlung. p. 54-65.
- Milch, W.** Über die Extinktion der langwelligen und der kurzwelligen Sonnenstrahlung in der Atmosphäre der Erde. p. 66-107.
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- Kuiper, P. Feenstra.** The green ray. p. 231-235.
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- Mémery, Henri.** L'influence des radiations astrales sur les vins. p. 908-909. (4 avril.)
- Moreux, Th.** Sur l'activité solaire et certains phénomènes de végétation. p. 1090-1091. (2 mai.)
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- Barnes, Howard T.** Thermit and icebergs. p. 611-634.
- General electric review. Schenectady. v. 30. 1927.*
- Peek, F. W., Jr.** The protection of oil tanks and reservoirs against lightning. p. 117. (Feb.) [Extract from art. in Journ. A. I. E. E.]
- Lee, Everett S., & Foust, C. M.** Measurement of surge voltages on transmission lines due to lightning. p. 135-145. (March.)
- Mitsuda, R.** Lightning survey in Japan. p. 124-128. (March.)
- Geografiska annaler. Stockholm. Årg. 9. H. 1-2. 1927.*
- Ahlmann, Hans W:son.** Physico-geographical researches in the Horung massif, Jotunheim. p. 9-66.
- Ångström, Anders.** Probleme und Aufgaben der meteorologischen Strahlungsforschung. p. 144-148.
- Bäckman, Allan.** L'influence de l'altitude et de la position géographique sur la température de l'air dans la région sud-ouest de la Suède. p. 133-141.
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SOLAR OBSERVATIONS

SOLAR AND SKY RADIATION MEASUREMENTS DURING APRIL, 1927

By HERBERT H. KIMBALL, Solar Radiation Investigations

For a description of instruments and exposures and an account of the method of obtaining and reducing the measurements, the reader is referred to the REVIEW for January, 1924, 52:42, January, 1925, 53:29, and July 1925, 53:318.

From Table 1 it is seen that solar radiation intensities averaged above the April normals at all three stations.

Table 2 shows a deficiency in the total solar radiation received on a horizontal surface from the sun and sky at the three stations for which normals have been determined, due to unusual cloudy conditions.

Skylight polarization measurements made at Madison on three days give a mean of 62 per cent, with a maximum of 65 per cent on the 3d. These are close to normal values for April at Madison. At Washington, measurements made on four days give a mean of 54 per cent, with a maximum of 60 per cent on the 11th. These are slightly below the corresponding averages for April at Washington.